

AMENDMENTS TO THE CLAIMS

Please cancel claims 1-19 and 21-31 and amend the claims as follows:

1-19. (Cancelled)

20. (Currently Amended) [[The]] A system of claim 11 comprising:

a process chamber;

a gas delivery system adapted to deliver a precursor from a vessel containing the precursor to the process chamber via a process gas produced by flowing a first carrier gas into the vessel and combining the first carrier gas with a second carrier gas flowing through a bypass around the vessel;

a precursor monitoring apparatus disposed between the process chamber and the vessel, wherein the precursor monitoring apparatus has a gas analyzer to generate a signal indicative of a concentration of the precursor in the process gas or the signal is indicative of the flow rate of the precursor, wherein the gas analyzer comprises consists of an ultrasonic transducer and a mass flow meter; and

an integral controller to receive the signal.

21-41. (Cancelled)